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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,266	02/01/2000	Koji Ichikawa	1982-0142P	5977

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EXAMINER	
VILLECCO, JOHN M	
ART UNIT	**PAPER NUMBER**
2612	4

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/496,266	ICHIKAWA, KOJI	
	Examiner	Art Unit	
	John M. Villecco	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 May 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6,9-11,13,16 and 18* is/are rejected.

7)☒ Claim(s) *3-5,7,8,12,14,15,17,19 and 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 February 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION II

Response to Arguments

1. Applicant's arguments filed May 13, 2004 have been fully considered but they are not persuasive.

2. Regarding claims 1 and 9, applicant argues that Sakai fails to specifically disclose that the transmissive color chart (4) is used for color correction of the image data to ensure that an image has the correct color balance in different light. Firstly, the claim does not state that the color correction using the transmissive color chart is done to correct color balance in different light. Secondly, Sakai does teach that the transmissive color chart (4) is used for color correction of image data. See column 4, lines 33-44. Thirdly, Sakata is used to show color charts used for color correction of image data. Therefore, Sakata is used to show the feature of a color chart used to correct color. Sakai, is used merely to show that transmissive color charts are commonly used to obtain color correction values in a standard lighting environment (col. 4, lines 5-6).

3. Additionally, upon further consideration, the color chart disposed in the lens cap (11) of Sakata would have to be some type of transparent or transmissive material, since the image sensor (20) would not be able to capture an image of the color chart if no light were able to reach the image sensor. Therefore, although Sakata does not explicitly teach a transmissive lens cap, this feature would have to be inherent in order for the image sensor to capture an image of the color chart. Sakai is used to show a transmissive color chart.

4. For the reasons stated above, the rejections from the previous office action will be repeated.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 6, 9-10, 13, 16, and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata et al. (U.S. Patent No. 5,119,178) in view of Sakai et al. (U.S. Patent No. 5,453,853).

7. Regarding ***claim 1***, Sakata discloses a method of manually correcting color in an imager. The system includes a color chart (14) located on the lens cap (11), a color bar signal generator (45), which would inherently store a plurality of color reproduction target values, and a set of potentiometers (62 and 63) and amplifiers (36 and 37) which act as the correction device and correct a color correction coefficient of image data obtained by photographing. See column 3, lines 25-49. Additionally, the lens cap (11) of Sakata would have to be some type of transparent or transmissive material, since the image sensor (20) would not be able to capture an image of the color chart if no light were able to reach the image sensor. Therefore, although Sakata does not explicitly teach a transmissive lens cap, this feature would have to be inherent in order for the image sensor to capture an image of the color chart.

Sakata however fails to explicitly state that the color chart is a transmission type chart. Sakai, on the other hand, discloses that it is well known in the art to perform color correction using a transparent color chart. Color chart (4) is a transmissive type color chart. It allows light

to pass through and impinge on the camera's (2) imager. In this manner, the light from a standard lighting apparatus (5) can be used for the color correction. To this effect, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the color chart of Sakata a transmissive-type color chart so that a standard ambient light can be used in the color correction process.

8. With regard to ***claim 6***, Sakata discloses a lens (10) upon which the lens cap (11) rests. Figure 2 shows a notch (17) formed on the lens cap (11). It is well known in the art that notches and groves are well known ways of aligning lens caps. It is obvious to one of ordinary skill in the art that this notch would be used to align the lens cap (11) on the lens (10).

9. Regarding ***claim 9***, Sakata discloses a method of manually correcting color in an imager. The system includes a color chart (14) located on the lens cap (11) and a set of potentiometers (62 and 63) and amplifiers (36 and 37) which act as the correction device and correct a white balance of the image data obtained by photographing. See column 3, lines 25-49. Additionally, the lens cap (11) of Sakata would have to be some type of transparent or transmissive material, since the image sensor (20) would not be able to capture an image of the color chart if no light were able to reach the image sensor. Therefore, although Sakata does not explicitly teach of transmissive lens cap, this feature would have to be inherent in order for the image sensor to capture an image of the color chart.

Sakata, however fails to explicitly state that the color chart is, a transmission type chart. Sakai, on the other hand, discloses that it is well known in the art to perform color correction using a transparent color chart. Color chart (4) is a transmissive type color chart. It allows light to pass through and impinge on the camera's (2) imager. In this manner, the light from a

standard lighting apparatus (5) can be used for the color correction. To this effect, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the color chart of Sakata a transmissive-type color chart so that a standard ambient light can be used in the color correction process.

10. As for ***claim 10***, Sakata discloses a color bar signal generator (45), which would inherently store a plurality of color reproduction target values. Furthermore, Sakai discloses that the color chart (4) is a transmissive type color chart. It allows light to pass through and impinge on the camera's (2) imager. In this manner, the light from a standard lighting apparatus (5) can be used for the color correction. To this effect, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the color chart of Sakata a transmissive-type color chart so that ambient light can be used in the color correction process. Furthermore, since the color chart is transmissive, the color correction would be based upon the light of an achromatic subject passing through the color chart. Additionally, Sakai discloses that the apparatus varies the color correction values to produce a higher quality color image.

11. ***Claim 13*** is considered substantively equivalent to claim 6. Please see the discussion of claim 6 above.

12. ***Claim 16*** is considered substantively equivalent to claim 2. Please see the discussion of claim 2 above.

13. ***Claim 18*** is considered substantively equivalent to claim 6. Please see the discussion of claim 6 above.

14. **Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata et al. (U.S. Patent No. 5,119,178) in view of Sakai et al. (U.S. Patent No. 5,453,853), and further in view of Udagawa et al. (U.S. Patent No. 6,195,125)**.

15. Regarding ***claim 2***, Sakata discloses the ability to switch to a manual correction mode using a switch (65, col. 2, line 60). After selecting the manual mode, the user then places the lens cap onto the lens, thereby imaging the color chart (14). Neither Sakata nor Sakai, specifically discloses that the lens cap (10) is automatically moved into and out of the optical axis of the picture-taking device. Udagawa, on the other hand, discloses that it is well known in the art to automatically move objects into and out of the light path of an image sensor. More specifically, Udagawa discloses filters (2-1 and 2-2) being moved into and out of the optical path in response to a sensitivity switching operating unit (10). The filter insertion/extraction units (13-1 and 13-2) automatically insert/extract the filters depending upon the selected mode. This feature allows for automatic setup of certain features without user intervention. Even though Udagawa does not disclose a color chart, it would have been obvious to one of ordinary skill in the art to automatically move the color chart into and out of the optical path of the image sensor in Sakata so that the user does not have to take the time to do it.

16. ***Claim 11*** is considered substantively equivalent to claim 2. Please see the discussion of claim 2 above.

Allowable Subject Matter

17. Claims 3-5, 7, 8, 12, 14, 15, 17, 19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. The following is a statement of reasons for the indication of allowable subject matter:

Regarding ***claim 3, 12, and 17***, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest the chart is disc-shaped and each of the single-color chromatic and single-color achromatic color portions are selectively positioned in the optical axis.

As for ***claim 7, 14, and 19***, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the chart has both a chromatic and an achromatic color portion selectively positioned in an optical axis and further comprising an identification device for identifying the portion of the chart is positioned in the optical axis.

With regard to ***claim 8, 15, and 20,*** the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest a plurality of single color charts selectively attachable to the lens and an identification device for identifying the chart that is connected.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this final action should be mailed to:

Box AF
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-6306, (for formal communications; please mark "**EXPEDITED PROCEDURE**"; for informal or draft communications, please label "**PROPOSED**" or "**DRAFT**")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (703) 305-1460. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John M. Villecco
July 13, 2004

TUAN HO
PRIMARY EXAMINER